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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 29

Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	Vail III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Submission Date	July 30, 2004

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
7	A1	US-6742606 B2	06/01/2004	Melcalfe, et al.	
	A2	US-6702040 B1	03/09/2004	Sensenig	
	A3	US-6668937	12/30/2003	Murray	
	A4	US6634430	10/21/2003	Dawson et al.	
	A5	US-6547017 B1	04/15/2003	Vail, III	
	A6	US-6543552 B1	04/08/2003	Melcalfe, et al.	
	A7	US-6536993 B2	03/25/2003	Strong, et al.	
	A8	US-6457532 B1	10/01/2002	Simpson	
	A9	US-6263987 B1	07/24/2001	Vail, III	
	A10	US-6216533 B1	04/17/2001	Woloson, et al.	
	A11	US-6189616 B1	02/20/2001	Gano, et al.	
	A12	US-6186233 B1	02/13/2001	Brunet	
	A13	US-6155360	12/05/2000	McLeod	
	A14	US-6135208	10/24/2000	Gano, et al.	
	A15	US-6098717	08/08/2000	Bailey et al.	
	A16	US-6070671	06/06/2000	Cumming et al.	
	A17	US-6035953	03/14/2000	Rear	
	A18	US-6024169	02/15/2000	Haugen	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
7	B1	DE 3 213 464	10/13/1983	Reimer		
	B2	DE 4 133 802	10/22/1992	Andrejewski		
	B3	EP 0 235 105	09/02/1987	Kjell-Oue		
	B4	EP 0 265 344	04/27/1988	Legendre		
	B5	EP 0 462 618	12/27/1991	Karlsson		

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77	A19	US-5887668	03/30/1999	Haugen et al.	
	A20	US-5887655	03/30/1999	Haugen, et al.	
	A21	US-5836409	11/17/1998	Vail, III	
	A22	US-5826651	10/27/1998	Lee, et al.	
	A23	US-5803666	09/08/1998	Keller	
	A24	US-5787978	08/04/1998	Carter, et al.	
	A25	US-5785132	07/28/1998	Richardson, et al.	
	A26	US-5717334	02/10/1998	Vail, III, et al.	
	A27	US-5706905	01/13/1998	Barr	
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	A29	US-5575344	11/19/1996	Wireman	
	A30	US-5560440	10/01/1996	Tibbitts	
	A31	US-5553679	09/10/1996	Thorp	
	A32	US-5546317	10/10/1995	Hood, III, et al.	
	A33	US-5526880	06/18/1996	Jordan, Jr., et al.	
	A34	US-5520255	05/28/1996	Barr et al.	
	A35	US-5477925	12/26/1995	Trahan, et al.	
	A36	US-5458209	10/17/1995	Hayes, et al.	
	A37	US-5435400	07/25/1995	Smith	
	A38	US-5402856	04/04/1995	Warren, et al.	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
77	B6	EP 0 554 568	08/11/1993	Tibbitts, et al.		
	B7	EP 0 961 007	12/06/1999	Gano, et al.		
	B8	EP 1 006 260	06/07/2000	Fincher, et al.		
	B9	GB 2 335 217	09/15/1999	Desai		

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First Named Inventor	Vail III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0528.P1
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		Number-Kind Code <sup>2</sup> (if known)			
	A39	US-5361859	11/08/1994	Tibbitts	
	A40	US-5322127	06/21/1991	McNair et al.	
	A41	US-5318122	06/07/1994	Murray, et al.	
	A42	US5181571	01/27/1993	Mueller	
	A43	US-5109924	05/05/1992	Jurgens, et al.	
	A44	US-5052483	10/01/1991	Hudson	
	A45	US-4904119	02/27/1990	Legendre, et al.	
	A46	US-4848469	07/18/1989	Baugh et al.	
	A47	US-4836299	06/06/1989	Bodine	
	A48	US-4825947	05/02/1989	Mikolajczyk	
	A49	US-4699224	10/13/1987	Burton	
	A50	US-4681158	07/21/1987	Pennison	
	A51	US-4620600	11/04/1986	Persson	
	A52	US-4604818	08/12/1996	Inoue	
	A53	US4595058	06/17/1986	Nations	
	A54	US-4515045	05/07/1985	Gnatchenko, et al.	
	A55	US-4489793	12/25/1984	Boren	
	A56	US-4483399	11/20/1984	Colgate	
	A57	US-4466498	08/21/1984	Bardwell	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	B10	GB 1 469 661	04/06/1977	Swobda, et al.		
	B11	GB 1 277 461	06/03/1972			
	B12	GB 1 448 304	09/02/1976			
	B13	GB 1 582 392	01/07/1981			

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Application Number

10/717,422

Filing Date

November 19, 2003

First Named Inventor

Vail III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

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7	A58	US-4446745	05/08/1994	Stone, et al.	
	A59	US-4396078	08/02/1983	Inoue	
	A60	US-4396077	09/12/1981	Radtke	
	A61	US-4274778	06/23/1981	Putnam, et al.	
	A62	US-4221269	09/09/1980	Hudson	
	A63	US-4189185	02/19/1980	Kammerer, Jr., et al.	
	A64	US-4186628	02/05/1990	Bonnice	
	A65	US-4100981	07/18/1978	Chaffin	
	A66	US-4083405	04/11/1978	Shirley	
	A67	US-3934660	01/27/1978	Nelson	
	A68	US-3901331	08/26/1975	Djurovic	
	A69	US-3785193	01/15/1974	Kinley et al.	
	A70	US-3700048	10/24/1972	Desmoulins	
	A71	US-3691624	09/19/1972	Kinley	
	A72	US-3669190	06/13/1972	Sizer et al.	
	A73	US-3624760	11/30/1971	Bodine	
	A74	US-3575245	04/20/1971	Cordary, et al.	
	A75	US-3489220	01/13/1970	Kinley	
	A76	US3387893	06/11/1968	Hoever	

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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
7	B14	GB 2 053 088	02/04/1981	Gebhart		
	B15	GB 2 201 912	09/14/1988	Dinsdale		
	B16	GB 2 313 860	02/10/1997	Lee		
	B17	GB 2 320 270	06/17/1998	Armell, et al.		
	B18	GB 2 333 542	07/28/1999	Kirk		

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	A77	US-3353599	11/21/1967	Swift	
	A78	US-3191680	06/29/1965	Vincent	
	A79	US-3191677	06/29/1965	Kinley	
	A80	US-3169592	02/26/1965	Kammerer	
	A81	US-3102599	09/03/1963	Hillburn	
	A82	US-3087546	04/30/1963	Wooley	
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	A86	US-2743087	04/24/1956	Layne, et al.	
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	A89	US-2627891	02/10/1953	Clark	
	A90	US-2499630	03/07/1950	Clark	
	A91	US-2324678	07/20/1943	Cox	
	A92	US2295803	09/15/1940	O'Leary	
	A93	US-2216895	10/08/1940	Stokes	
	A94	US-2060352	11/11/1936	Stokes	

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	B19	GB 2 365 463	02/20/2002	Giancarlo		
	B20	GB 2 382 361	05/28/2003	Hewson, et al.		
	B21	GB 2 216 926	10/18/1989	Haloid		
	B22	GB 2 348 223	09/27/2000	Cook, et al.		

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7	A95	US-2049450	08/04/1936	Johnson	
	A96	US-2017451	10/15/1935	Wickersham	
	A97	US-1981525	11/20/1934	Price	
	A98	US-1880218	10/04/1932	Simmons	
	A99	US-1342424	06/08/1920	Cotten	
	A100	US-1301285	04/22/1919	Leonard	
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	A102	US-2004/0069501	04/15/2004	Haugen et al.	
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	A116	US-4960173	10/02/1990	Cognevich, et al.	
	A117	US-4651837	03/24/1987	Mayfield	
	A118	US-3603411	09/07/1971	Link	
	A119	US-3552508	01/05/1971	Brown	

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7	B23	GB 540 027	10/02/1941			
	B24	GB 7 928 86	04/12/1958			
	B25	GB 8 388 33	06/22/1960			
	B26	GB 9 977 21	07/07/1965	Garnier, et al.		

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7	B27	USSR 112631	01/10/1956	Barshai, et al.		
	B28	USSR 1304470	08/31/1984	Gelfat, et al.		
	B29	USSR 1808972	05/22/1991	Voroshbitov, et al.		
	B30	USSR 247162	05/10/1967	Barshai, et al.		
	B31	USSR 395557	12/30/1971	Barshai, et al.		
	B32	USSR 415346	03/03/1972	Barshai, et al.		
	B33	USSR 461218	04/23/1973	Barshai, et al.		
	B34	USSR 481689	06/09/1972	Barshai, et al.		
	B35	USSR 501139	12/14/1973	Barshai, et al.		
	B36	USSR 581238	02/23/1976	Barshai, et al.		
	B37	USSR 583278	08/30/1974	Barshai, et al.		
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	B39	USSR 601390	01/12/1976	Barshai, et al.		
	B40	USSR 655843	03/22/1977	Barshai, et al.		
	B41	USSR 659260	04/02/1967	Barshai		
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	B44	USSR 955765	02/09/1981	Gelfat, et al.		
	B45	WO 00/37766	06/29/2000	Simpson, et al.		
	B46	WO 01/83932	11/08/2001	Tulloch		
	B47	WO 90/06418	06/14/1990	Schulze-Bechinghausen		
	B48	WO 92/01139	01/23/1992	Nobilequ		
	B49	WO 92/18743	10/29/1992	Pietras		
	B50	WO 92/20899	11/26/1992	Ellis		
	B51	WO 93/24728	12/09/1993	Simpson		

Examiner

Date Considered

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	Vail III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Submission Date	July 30, 2004

Sheet 8 of 29

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
7	B52	WO 95/10686	04/20/1995	Lorenz, et al.		
	B53	WO 96/28635	09/19/1996	Strong, et al.		
	B54	WO 98/09053	03/05/1998	Murray, et al.		
f	B55	WO 99/23354	05/14/1999	Metcalfe		
	B56	WO 99/37881	07/29/1999	Kirk, et al.		
	B57	WO 99/50528	10/07/1999	Kuck, et al.		
	B58	WO 99/64713	12/16/1999	Wardley		
	B59	WO 99/11902	03/11/1999	Hollingsworth		
7	B50	FR 2053088	07/20/1970	Gottwald		
	B72	WO 00/08293	02/17/2000	Van Drentham-Susman		
	B73	WO 91/16520	10/31/1991	Hallundbaek		
	B74					
	B75					
	B76					
	B77					
	B78					

Examiner

Date Considered

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	Vail III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Submission Date	July 30, 2004

Sheet 9 of 29

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
7	C1	HAHN, ET AL., "Simultaneous Drill and Case Technology - Case Histories, Status and Options for Further Development," Society of Petroleum Engineers, IADC/SPE Drilling Conference, New Orleans, LA Feb. 23-25, 2000 pp. 1-9.	
	C2	M.B. STONE and J. SMITH, "Expandable Tubulars and Casing Drilling are Options" Drilling Contractor, January/February 2002, pp. 52.	
	C3	M. GELFGAT, "Retractable Bits Development and Application" Transactions of the ASME, Vol. 120, June (1998), pp. 124-130.	
	C4	"First Success with Casing-Drilling" Word Oil, February (1999), pp. 25.	
	C5	DEAN E. GADDY, Editor, "Russia Shares Technical Know-How with U.S." Oil & Gas Journal, March (1999), pp. 51-52 and 54-56.	
	C6	United States Patent Application 10/794,800, filed March 5, 2004 (WEAT/0360)	
	C7	United States Patent Application 10/832,804, filed April 27, 2004 (WEAT/0383.P1)	
	C8	United States Patent Application 10/795,214, filed March 5, 2004 (WEAT/0373)	
	C9	United States Patent Application 10/794,795, filed March 5, 2004 (WEAT/0357)	
	C10	United States Patent Application 10/775,048, filed February 9, 2004 (WEAT/0359)	
7	C11	United States Patent Application 10/772,217, filed February 2, 2004 (WEAT/0344)	
7	C12	United States Patent Application 10/788,976, filed February 27, 2004 (WEAT/0372)	

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		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0526.P1
Sheet 10	of 29	Submission Date	July 30, 2004

## NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
7	C13	United States Patent Application 10/794,797, filed March 5, 2004 (WEAT/0371)	
	C14	United States Patent Application 10/767,322, filed January 29, 2004 (WEAT/0343)	
	C15	United States Patent Application 10/795,129, filed March 5, 2004 (WEAT/0366)	
	C16	United States Patent Application 10/794,790, filed March 5, 2004 (WEAT/0329)	
	C17	United States Patent Application 10/162,302, filed June 4, 2004 (WEAT/0410)	
	C18	Rotary Steerable Technology – Technology Gains Momentum, Oil & Gas Journal, 12/28/1998	
	C19	Directional Drilling, M. Mims, World Oil, May 1999, pp. 40-43	
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	C21		
	C22		
	C23		
	C24		

Examiner	Date Considered
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		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0528.P1
Sheet 11	of 29	Submission Date	July 30, 2004

**U.S. Patent Documents**

*Examine r Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
7	A120	6,591,471	07-15-2003	Hollingsworth et al.			
	A121	6,554,064	04-29-2003	Restarick et al.			
	A122	6,538,576	03-25-2003	Schultz et al.			
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	A124	6,527,064	03-04-2003	Hallundbaek			
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	A129	6,443,247	09-03-2002	Wardley			
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	A131	6,427,776	08-06-2002	Hoffman et al.			
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	A139	6,378,630	04-30-2002	Ritorto et al.			
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7	A141	6,374,924	04-23-2002	Hanton et al.			
	A142	6,371,203	04-16-2002	Frank et al.			

Examiner

*Frank [Signature]*

Date Considered

*8/12/04*

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		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0526.P1
		Submission Date	July 30, 2004
Sheet	12	of	29

U.S. Patent Documents							
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
7	A143	6,359,569	03-19-2002	Beck et al.			
	A144	6,357,485	03-19-2002	Quigley et al.			
	A145	6,343,649	02-05-2002	Beck et al.			
	A146	6,325,148	12-04-2001	Trahan et al.			
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	A150	6,263,987	07-24-2001	Vail, III			
	A151	6,234,257	05-22-2001	Ciglenec et al.			
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	A153	6,206,112	03-27-2001	Dickinson, III et al.			
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	A156	6,182,776	02-06-2001	Asberg			
	A157	6,172,010	01-09-2001	Argillier et al.			
7	A158	6,170,573	01-09-2001	Brunet et al.			
7	A159	6,158,531	12-12-2000	Vail, III			
Examiner <i>[Signature]</i>					Date Considered <i>8/12/04</i>		
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Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 13

of 29

Application Number

10/717,422

Filing Date

November 19, 2003

First Named Inventor

Vail III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

WEAT/0526.P1

Submission Date

July 30, 2004

## U.S. Patent Documents

*Examine r Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
7	A160	6,119,772	09-19-2000	Pruet			
	A161	6,065,550	05-23-2000	Gardes			
	A162	6,062,326	05-16-2000	Strong et al.			
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	A164	6,059,053	05-09-2000	McLeod			
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	A167	6,000,472	12-14-1999	Albright et al.			
	A168	5,971,079	10-26-1999	Mullins			
	A169	5,957,225	09-28-1999	Sinor			
	A170	5,950,742	09-14-1999	Caraway			
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7	A180	5,860,474	01-19-1999	Stoltz et al.			
	A181	5,845,722	12-08-1998	Makohl et al.			

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		Application Number	10/717,422
		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0526.P1
		Submission Date	July 30, 2004
Sheet 14	of 29		

**U.S. Patent Documents**

*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
7	A182	5,842,530	12-01-1998	Smith et al.			
	A183	5,839,519	11-24-1998	Spedale, Jr.			
	A184	5,839,330	11-24-1998	Stokka			
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	A187	5,785,134	07-28-1998	McLeod et al.			
	A188	5,746,276	05-05-1998	Stuart			
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7	A201	5,582,259	12-10-1996	Barr			
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Examiner

Date Considered

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/717,422
		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0526.P1
Sheet 15	of 29	Submission Date	July 30, 2004

U.S. Patent Documents							
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
A	A203	5,551,521	09-03-1996	Vail, III			
	A204	5,547,029	08-20-1996	Rubbo et al.			
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	A207	5,497,840	03-12-1996	Hudson			
	A208	5,472,057	12-05-1995	Winfree			
	A209	5,452,923	09-26-1995	Smith			
	A210	5,386,746	02-07-1995	Hauk			
	A211	5,379,835	01-10-1995	Streich			
	A212	5,368,113	11-29-1994	Schulze-Beckinghausen			
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	A214	5,354,150	10-11-1994	Canales			
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	A218	5,323,858	06-28-1994	Jones et al.			
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A	A221	5,297,833	03-29-1994	Willis et al.			
	A222	5,294,228	03-15-1994	Willis et al.			

Examiner	<i>Frederick</i>	Date Considered	<i>8/1/04</i>
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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/717,422
		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0526.P1
		Submission Date	July 30, 2004
Sheet	16	of	29

U.S. Patent Documents								
*Examiner Initial	Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate		
7	A223	5,291,956	03-08-1994	Mueller et al.				
	A224	5,285,204	02-08-1994	Sas-Jaworsky				
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	A227	5,271,472	12-21-1993	Letumo				
	A228	5,255,751	10-26-1993	Stogner				
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	A231	5,197,553	03-30-1993	Letumo				
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	A233	5,186,265	02-16-1993	Henson et al.				
	A234	5,172,765	12-22-1992	Sas-Jaworsky				
	A235	5,168,942	12-08-1992	Wydrinski				
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Examiner	Fae [Signature]				Date Considered [Signature]			
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.								





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Sheet 17

of 29

Application Number

10/717,422

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November 19, 2003

First Named Inventor

Vail III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

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July 30, 2004

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Examiner

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*Examiner Initial	Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
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Examiner

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<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(Use as many sheets as necessary)</p>		Application Number	10/717,422
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		Group Art Unit	3672
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Examiner

*[Signature]*

Date Considered

*[Signature]*

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10/717,422

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First Named Inventor

Vail III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

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		Group Art Unit	3672
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### U.S. Patent Documents

*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
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		Group Art Unit	3672
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Foreign Patent Documents								
*Examine Initial		Document Number	Date	Country	Class	Subclass	Translation	
							YES	NO
7	B74	WO 02/086287	10-31-2002	WIPO	E21B	47/01	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B75	WO 01/94739	12-13-2001	WIPO	E21B	7/20	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B76	WO 01/94738	12-13-2001	WIPO	E21B	7/20	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B77	WO 01/81708	11-01-2001	WIPO	E21B	10/32	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B78	WO 01/79650	10-25-2001	WIPO	E21B	10/60	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B79	WO 01/46550	06-28-2001	WIPO	E21B	7/20	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B80	WO 01/12946	02-22-2001	WIPO	E21B	19/00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B81	WO 00/50730	08-31-2000	WIPO	E21B	10/66	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B82	WO 00/28188	05-18-2000	WIPO	E21B	7/06	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B83	WO 00/37771	06-29-2000	WIPO	E21B	43/10	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B84	WO 00/11311	03-02-2000	WIPO	E21B	19/16	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B85	WO 00/11310	03-02-2000	WIPO	E21B	19/16	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B86	WO 00/11309	03-02-2000	WIPO	E21B	19/16	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B87	WO 00/05483	02-03-2000	WIPO	E21B	19/16	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B88	WO 98/55730	12-10-1998	WIPO	E21B	23/00	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B89	WO 97/08418	03-06-1997	WIPO	E21E	4/18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B90	GB 2 357 101	06-13-2001	UK	E21B	7/06	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B91	EP 1 050 661	11-08-2000	EP	E21B	7/18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B92	EP 0 571 045	08-19-1998	EP	E21B	7/06	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	7	B93	GB 2 216 926	10-18-1989	UK	E21B	7/20	<input type="checkbox"/>
B94		SU 1618870	01-07-1991	Russia	E21B	33/14	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B95		WO 96/28635	09-19-1996	WIPO	E21B	17/14	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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		Group Art Unit	3672
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		Attorney Docket Number	WEAT/0526.P1
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7	C58	Coats, et al., "The Hybrid Drilling System: Incorporating Composite Coiled Tubing And Hydraulic Workover Technologies Into One Integrated Drilling System," IADC/SPE Paper 74538, IADC/SPE Drilling Conference, February 26-28, 2002, pp 1-7
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Examiner	Date Considered	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.		



Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Application Number	10/717,422
		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0526.P1
		Submission Date	July 30, 2004
Sheet	27	of	29

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*Examiner Initial		Including Author, Title, Date, Pertinent Pages, Etc.
7	C60	Fontenot, et al., "New Rig Design Enhances Casing Drilling Operations In Lobo Trend," paper WOCD-0306-04, World Oil Casing Drilling Technical Conference, March 6-7, 2003, pp. 1-13
	C61	McKay, et al., "New Developments In The Technology Of Drilling With Casing: Utilizing A Displaceable DrillShoe Tool," Paper WOCD-0306-05, World Oil Casing Drilling Technical Conference, March 6-7, 2003, pp. 1-11
	C62	Sutriano - Santos, et al., "Drilling With Casing Advances To Floating Drilling Unit With Surface BOP Employed," Paper WOCD-0307-01, World Oil Casing Drilling Technical Conference, March 6-7, 2003, pp. 1-7
	C63	Vincent, et al., "Liner And Casing Drilling - Case Histories And Technology," Paper WOCD-0307-02, World Oil Casing Drilling Technical Conference, March 6-7, 2003, pp. 1-20
	C64	Maute, "Electrical Logging: State-of-the Art," The Log Analyst, May-June 1992, pp. 206-27
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	C67	Rotary Drilling, Open-Hole Fishing, Unit III, Lesson 2, Third Edition
	C68	Rotary Drilling, Casing and Cementing, Unit II, Lesson 4, Second Edition
	C69	Rotary Drilling, Drilling a Straight Hole, Unit II, Lesson 3, Second Edition
	C70	Rotary Drilling, The Bit, Unit I, Lesson 2, Third Edition
	C71	Rotary Drilling, Blowout Prevention, Unit III, Lesson 3, Third Edition
7	C72	Well Servicing and Workover, Artificial Lift Methods, Lesson 5, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
7	C73	Rotary Drilling, Drilling Mud, Unit II, Lesson 2, Third Edition

Examiner

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		Filing Date	November 19, 2003
		First Named Inventor	Vail III
		Group Art Unit	3672
		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0526.P1
Sheet 28	of 29	Submission Date	July 30, 2004

**OTHER ART**

*Examiner Initial		Including Author, Title, Date, Pertinent Pages, Etc.
	C74	Rotary Drilling, Subsea Blowout Preventers and Marine Riser Systems, Unit III, Lesson 4
	C75	Well Servicing and Workover, Control of Formation Pressure, Lesson 9, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C76	Well Servicing and Workover, Production Rig Equipment, Lesson 6, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C77	Well Servicing and Workover, Petroleum Geology and Reservoirs, Lesson 2, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C78	Well Servicing and Workover, Well Logging Methods, Lesson 3, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C79	Well Servicing and Workover, Introduction to Oil Well Service and Workover, Lesson 1, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C80	Well Servicing and Workover, Well Completion Methods, Lesson 4, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C81	Rotary Drilling, Controlled Directional Drilling, Unit III, Lesson 1, Third Edition
	C82	Well Servicing and Workover, Well Stimulation Treatments, Lesson 11, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C83	Rotary Drilling, Making Hole, Unit II, Lesson 1, Second Edition
	C84	Well Servicing and Workover, Well Cleanout and Repair Methods, Lesson 8, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C85	Well Servicing and Workover, Well Servicing and Repair, Lesson 7, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas
	C86	Rotary Drilling, Circulating Systems, Unit I, Lesson 8, Third Edition
	C87	Well Servicing and Workover, Well Service and Workover Profitability, Lesson 12, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas

Examiner

Date Considered

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				Filing Date	November 19, 2003
				First Named Inventor	Vail III
				Group Art Unit	3672
				Examiner Name	Unknown
				Attorney Docket Number	WEAT/0526.P1
				Submission Date	July 30, 2004
Sheet	29	of	29		

## OTHER ART

[illegible]

**Examiner**

### Data Considered

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1

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of 12

Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

**U.S. PATENT DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
7	A1	US-2,167,338	07-25-1939	Murcell	
	A2	US-2,228,503	01-14-1941	Boyd, et al.	
	A3	US-2,370,832	03-06-1945	Baker	
	A4	US-2,379,800	07-03-1945	Hare	
	A5	US-2,414,719	01-21-1947	Cloud	
	A6	US-2,720,267	10-11-1955	Brown	
	A7	US-2,741,907	06-06-1997	Genender, et al.	
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Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>8</sup>
		Number-Kind Code <sup>2</sup> (if known)				
7	B1	CA 2 335 192	11-30-2001	Kozak		
	B2	DE 3 523 221	02-01-1987	Svetozar		
	B3	DE 3 918 132	12-14-1989	Eriksson		
	B4	EP 0 474 481	03-11-1992	Moody		
	B5	EP 0 087 373	08-31-1983	Plaquin		

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			Application Number	10/717,422
			Filing Date	November 19, 2003
			First Named Inventor	William Banning Vail, III
			Group Art Unit	3672
			Examiner Name	Unknown
			Attorney Docket Number	WEAT/0526.P1
			Customer No.	36735
Sheet 2	of 12	Submission Date		

### U.S. PATENT DOCUMENTS

Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
A	A19	US-3,552,507	01-05-1971	Brown	
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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Number-Kind Code <sup>2</sup> (if known)				
B	B6	EP 0 162 000	11-21-1985	Hamilton		
	B7	EP 0 171 144	02-12-1986	Stringfellow, et al.		
B8	B8	EP 0 285 386	10-05-1988	Haney		
B9	B9	EP 0 426 123	05-08-1991	Reis, et al.		
B10	B10	EP 0 525 247	02-03-1993	Willis		

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Date Considered

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

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## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
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	A54	US-4,625,796	12-02-1986	Boyadjieff	

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		Number-Kind Code <sup>2</sup> (if known)				
	B11	EP 0 589 823	03-03-1994	Busink, et al.		
	B12	EP 0 659 975	06-28-1995	Nagaoka, et al.		
	B13	EP 0 790 386	08-20-1997	Newton, et al.		
	B14	EP 0 881 354	04-24-1998	Vercaemen, et al.		
	B15	EP 0 962 384	12-08-1999	Poldervaart		

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

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**U.S. PATENT DOCUMENTS**

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		Number-Kind Code <sup>2</sup> (if known)			
7	A55	US-4,646,827	03-03-1987	Cobb	
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	A57	US-4,667,752	05-26-1987	Berry, et al.	
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	A65	US-4,759,239	07-26-1988	Hamilton, et al.	
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	A67	US-4,773,689	09-27-1988	Wolters	
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	A71	US-4,791,997	12-20-1988	Krasnov	
	A72	US-4,793,422	12-27-1988	Krasnov	

**FOREIGN PATENT DOCUMENTS**

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		Number-Kind Code <sup>2</sup> (if known)				
7	B16	EP 1 256 691	11-13-2002	Hawkins, et al.		
	B17	FR 2 841 293	12-26-2003	Bouygues Offshore		
	B18	GB 2 115 940	09-14-1983	Plaquin		
	B19	GB 2 224 481	09-05-1990	Voeten		
	B20	GB 2 275 486	04-15-1993	Elane, et al.		

Examiner

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

Sheet 5

of 12

## **U.S. PATENT DOCUMENTS**

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	A74	US-4,806,928	02-21-1989	Veneruso	
	A75	US-4,813,493	03-21-1989	Shaw, et al.	
	A76	US-4,836,064	06-06-1989	Slator	
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	A81	US-4,962,579	10-16-1990	Moyer, et al.	
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	A83	US-5,036,927	08-06-1991	Willis	
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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Number-Kind Code <sup>2</sup> (if known)				
7	B21	GB 2 294 715	08-05-1996	Tibbitts		
	B22	GB 2 349 401	11-01-2000	Roberts, et al.		
	B23	GB 2 352 747	07-02-2001	Davis, et al.		
	B24	GB 2 357 530	06-27-2001	Schulze-Beckinghausen		
	B25	GB 2 372 765	09-04-2002	Head		

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Application Number 10/717,422

Filing Date November 19, 2003

First Named Inventor William Banning Vail, III

Group Art Unit 3672

Examiner Name Unknown

Attorney Docket Number WEAT/0526.P1

Customer No. 36735

Sheet 6

of 12

Submission Date

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
7	A91	US-5,271,468	12-21-1993	Streich, et al.	
	A92	US-5,305,839	04-26-1994	Kalsi, et al.	
	A93	US-5,332,043	07-26-1994	Ferguson	
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	A95	US-5,388,651	02-14-1995	Berry	
	A96	US-5,394,823	03-07-1995	Lenze	
	A97	US-5,433,279	07-18-1995	Tassari, et al.	
	A98	US-5,494,122	02-27-1996	Larsen, et al.	
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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Number-Kind Code <sup>2</sup> (if known)				
7	B26	GB 709 365	05-19-1954	Standard Oil Development		
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	B28	GB 881 358	11-01-1961	Kammerer, et al.		
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Examiner

Date Considered

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number 10/717,422

Filing Date November 19, 2003

First Named Inventor William Banning Vail, III

Group Art Unit 3672

Examiner Name Unknown

Attorney Docket Number WEAT/0526.P1

Customer No. 36735

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Submission Date

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A119	US-5,803,191	09-08-1998	Mackintosh	
	A120	US-5,813,456	09-29-1998	Milner, et al.	
	A121	US-5,836,395	11-17-1998	Budde	
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	A128	US-5,988,273	11-23-1999	Monjure, et al.	
	A129	US-6,056,060	05-02-2000	Abrahamsen, et al.	
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## **FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
		Number-Kind Code <sup>2</sup> (if known)				
	B31	WO 00/39429	07-06-2000	Pietras		
	B32	WO 00/39430	07-06-2000	Pietras		
	B33	WO 00/46484	08-10-2000	Van Buren, et al.		
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	B35	WO 02/081863	10-17-2002	Simpson, et al.		

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

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of 12

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	A137	US-6,223,823	05-01-2001	Head	
	A138	US-6,227,587	05-08-2001	Terral	
	A139	US-6,275,938	08-14-2001	Bond, et al.	
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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Number-Kind Code <sup>2</sup> (if known)				
	B36	WO 02/44601	06-06-2002	Appleford, et al.		
	B37	WO 03/087525	10-23-2003	Vincent, et al.		
	B38	WO 93/07358	04-15-1993	Elane, et al.		
	B39	WO 96/18799	06-20-1996	Stokka		
	B40	WO 98/05844	02-12-1998	Stokka		

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Date Considered

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

Sheet 9

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**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
7	A155	US-6,698,595	03-02-2004	Norell, et al.	
	A156	US-6,725,938	04-27-2004	Pietras	
	A157	US-6,742,596	06-01-2004	Haugen	
	A158	US-6,742,606	06-01-2004	Metcalfe, et al.	
	A159	US-2002/0070842	04-17-2003	Bailey, et al.	
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	A161	US-2003/0029641	02-13-2003	Meehan	
	A162	US-2003/0056947	03-27-2003	Cameron	
	A163	US-2003/0164250	09-04-2003	Wardley	
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	A169	US-2004/0011534	01-22-2004	Simonds, et al.	
	A170	US-2004/0060697	04-01-2004	Tilton, et al.	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Number-Kind Code <sup>2</sup> (if known)				
	B41	WO 98/11322	03-19-1998	Gjedebo		
	B42	WO 98/32948	07-30-1998	Pietras		
7	B43	WO 99/35368	07-15-1999	Lohbeck, et al.		
	B44	WO 99/41485	08-19-1999	Pietras		
	B45	WO 99/58810	11-18-1999	Abrahamsen, et al.		

Examiner

Date Considered

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

Sheet 10

of 12

## **U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
7	A173	US-2004/0108142	06-10-2004	Vail, III	
	A174	US-2004/0112646	06-17-2004	Vail	
	A175	US-2004/0118613	06-24-2004	Vail	
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	A184	US-			
	A185	US-			
	A186	US-			
	A187	US-			
	A188	US-			
	A189	US-			
	A190	US-			

## **FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Number-Kind Code <sup>2</sup> (if known)				
	B46	FR 2741907	06-06-1997	Leighton		
	B47					
	B48					
	B49					
	B50					

Examiner

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10/717,422
Filing Date	November 19, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0526.P1
Customer No.	36735
Submission Date	

Sheet 11

of 12

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
77		DETLEF HAHN, FRIEDHELM MAKOHL, and LARRY WATKINS, Casing-While Drilling System Reduces Hole Collapse Risks, Offshore, Pages 54, 56, and 59, February 1998	
		YAKOV A. GELFGAT, MIKHAIL Y. GELFGAT and YURI S. LOPATIN, Retractable Drill Bit Technology – Drilling Without Pulling Out Drillpipe, Advanced Drilling Solutions Lessons From the FSU; June 2003; Vol. 2, pps. 351-464	
		TOMMY WARREN, SPE, BRUCE HOUTCHENS, SPE, GARRET MADELL, SPE, Directional Drilling With Casing, SPE/IADC 79914, Tesco Corporation, SPE/IADC Drilling Conference 2003	
		LaFleur Petroleum Services, Inc., "Autoseal Circulating Head," Engineering Manufacturing, 1992, 11 Pages	
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Date Considered

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November 19, 2003

**William Banning Vail, III**

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